



32-BIT MICROPROCESSOR BASED LOW POWER IOT SOC

OVERVIEW

THEJAS32 is a low-power SoC for robust embedded applications such as Sensor Fusion, Smart Metering, Wearable electronics, IoT devices, etc. The SoC integrates the power of the VEGA ET1031 32-bit Microprocessor with various communication interface /peripheral IPs from the ASTRA portfolio in LQFP 128 package.

FEATURES

- > VEGA ET1031 Microprocessor
 - 32-bit RISC-V ISA
 - 3-stage in-order pipeline
 - Harvard architecture
 - High-performance multiply / divide unit
 - Low interrupt latency
 - Vectored interrupt support
- Clock frequency up to 100MHz
- > 3.3V IO Voltage
- > Up to 2MB Boot Flash via SPI
- > 256 KB SRAM
- > 4 x SPI, 3 x I2C, 3 x UART
- > 32 x GPIO, 8 x PWM
- Low Power Operation
- > 128-Pln LQFP Package

Government of India

TARGET APPLICATIONS

- Sensor fusion
- > Smart Meter
- System supervisors
- Remote sensors
- Small lot devices
- Wearable devices
- Motor drives
- > Electronic Tovs
- Electronic education devices
- > Inverters
- Industrial networking
- Legacy 8/16-bit applications



Centre for Development of Advanced Computing Hardware Design Group Thiruvananthapuram, Kerala – 695033

Phone: 0471-272 5897, 2723333 (Ext: 347) Mob: +91 9037 569 219

E-Mail: vega@cdac.in , www.vegaprocessors.in

